AMENDMENTS TO THE SPECIFICATION

Please amend the specification at the paragraphs indicated below such that paragraphs of the specification at those indicated locations are as follows:

A. The paragraphs beginning at page 4, line 5, and carrying over to page 5, line 21:

Referring to Figure 1, an arc discharge metal halide lamp, 10, is shown in a partial cross section view having a bulbous borosilicate glass envelope, 11, partially cut away in this view, fitted into a conventional Edison-type metal base, 12. Lead-in electrode wires, 14 and 15, of nickel or soft steel each extend from a corresponding one of the two electrically isolated electrode metal portions in base 12 parallely through and past a borosilicate glass flare, 16, positioned at the location of base 12 and extending into the interior of envelope 11 along the axis of the major length extent of that envelope. Electrical access wires 14 and 15 extend initially on either side of, and in a direction parallel to, the envelope length axis past flare 16 to have portions thereof located further into the interior of envelope 11. Some remaining portion of each of access wires 14 and 15 in the interior of envelope 11 are bent at ~~acute~~ obtuse angles away from this initial direction past which bent access wire 14 ends following some further extending thereof to result in it more or less crossing the envelope length axis.

Access wire 15, however, with the first obtuse bend therein past flare 16 directing it away from the envelope length axis, is bent again obtusely to have the next portion thereof extend substantially parallel that axis, and is further bent again at a right angle to have the succeeding portion thereof extend substantially perpendicular to, and more or less cross that axis near the other end of envelope 11 opposite that end thereof fitted into base 12. The portion of wire 15 parallel to the envelope length axis supports a conventional getter, 19, to capture gaseous impurities. A further two right angle bends in wire 15 places a short remaining end portion of that wire below and parallel to the last portion thereof originally described as crossing the envelope length axis which short end

portion is finally anchored at this far end of envelope 11 from base 12 in a borosilicate glass dimple, 16'.

A ceramic arc discharge chamber, 20, configured about a contained region as a shell structure having ceramic walls, such as polycrystalline primarily alumina walls, that are translucent to visible light, is shown in one possible configuration in Figure 1, and in more detail in Figure 2. Chamber 20 has a pair of small inner and outer diameter ceramic truncated cylindrical shell portions, or tubes, 21a and 21b, that each flare outward at the interior end thereof into a corresponding one of a pair of rounded shell structure end portions, 22a and 22b, which smoothly join with a primary central portion chamber shell structure, 25, therebetween in providing corresponding more or less hemispherical shaped shells at opposite ends of chamber 20, except near tubes 21a and 21b[[, to]]. ~~thereby~~ Thereby, they altogether form a single piece unitary chamber structure about an enclosed interior space without the presence of overlapping wall structures of assembled different parts. Primary central portion chamber structure 25 has a larger diameter truncated cylindrical shell portion between the chamber ends relative to the diameters of tubes 21a and 21b. Such a structure is formed by compacting alumina powder and sintering the resulting powder compact. Alternatively, the structure 25, ends 22a and 22b, and tubes 21a and 21b can be formed separately in the same manner and then joined together at the end surfaces thereof by sintering to again avoid overlapping wall structures.

B. The paragraphs beginning at page 7, line 10 and carrying over to page 8, line 9:

In addition, a tungsten electrode coil, 32a, is integrated and mounted to the tip portion of the other end of the first main electrode shaft 31a by welding, so that electrode 33a is configured by main electrode shaft 31a and electrode coil 32a. Electrode 33a is formed of tungsten for good thermionic emission of electrons while withstanding relatively well the chemical attack of the metal halide plasma. Lead-through wire 29a, spaced from tube 21a by a molybdenum coil, 34a, serves to dispose electrode 33a at a predetermined position in the region contained in the main volume of arc

discharge chamber 20. A typical diameter of interconnection wire 26a is 1.2 mm, and a typical diameter of electrode shaft 31a is 0.6 mm.

Similarly, in Figure 2, a glass frit, 27b, affixes wire an alumina-molybdenum lead-through wire, 29b, to the inner surface of tube 21b (and hermetically sealing that interconnection wire opening with wire 29b passing therethrough). Thus, wire 29b, which can withstand the resulting chemical attack resulting from the forming of a plasma in the main volume of chamber 20 during operation and has a thermal expansion characteristic that relatively closely matches that of tube 21b and that of glass frit 27b, is connected to one end of interconnection wire 26b by welding as indicated above. The other end of lead-through wire 29b is connected to one end of a tungsten main electrode shaft, 31b, by welding. A tungsten electrode coil, 32b, is integrated and mounted to the tip portion of the other end of the first main electrode shaft 31b by welding, so that electrode 33b is configured by main electrode shaft 31b and electrode coil 32b. Lead-through wire 29b, spaced from tube 21b by a molybdenum coil, 34b, serves to dispose electrode 33b at a predetermined position in the region contained in the main volume of arc discharge chamber 20. A typical diameter of interconnection wire 26b is also 1.2 mm, and a typical diameter of electrode shaft 31 is again 0.6 mm. The distance between electrodes 33a and 33b is designated L_e, and any plane including the longitudinal axis of symmetry of the interior surface of structure 25 passes through the longitudinal centers of these electrodes.

C. The paragraph beginning on page 9, line 14, and carrying over to page 10, line 2:

In addition, the rounded end structure 22a and 22b have to each accommodate an electrode therein or thereby in such a manner that the heat developed in the electrode during operation does not damage these end structures. Avoiding such damage requires that the temperature of rounded shell structure end portions 22a and 22b should be below approximately 1250°C. Since electrodes 33a and 33b normally operate at about 2300°C to 2500°C at the ends thereof furthest into the enclosed space of chamber 20, this end structure wall temperature requirement necessitates

keeping the interior ends of electrodes 33a and 33b at least some minimum distance away from the walls of the corresponding one of rounded shell structure end portions 22a and 22b even though being typically positioned therein. Such separation distances being [[is]] less than 1mm results in the wall temperature becoming excessive leading to chamber 20 shell structure walls tending to crack. Therefore, a practical minimum separation distance of about 1mm or greater must be maintained which in turn leads to a limitation on the hemispherical radius of ends 22a and 22b of $R_h > 1$mm as providing an acceptably long life for chamber 20 and so lamp 10.